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GARDEN CALENDAR

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U. S. Department of Agriculture

A radio discussion by W.R. Beattie, Bureau of Plant Industry, delivered in the Department of Agriculture period of the National Farm and Home Hour, broadcast by a network of 49 associate NBC radio stations, Tuesday, February 28, 1933.

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Hello folks: Tomorrow will be the first day of March, and if you have not already made a start in your gardening work, you're doubtless making your plans, and perhaps looking up varieties and ordering seeds. In my garden calendar talks I've repeatedly referred to certain disease-resistant strains and varieties of vegetables that give good results on land where the ordinary varieties normally fail, due to diseases. The results obtained by plant breeders in the creation of disease-resistant varieties have been little short of phenomenal, but I'm afraid some of you have the idea that these new varieties will make good under all conditions, and so I want to warn you not to expect too much, and to remind you that they require just the same care and culture as ordinary varieties.

First, let me state that each of these resistant varieties was created to overcome losses due to some particular disease. Take the rust-resistant asparagus, for example, which was created for sections where the rust disease had cut down yields to a point where it was no longer profitable to keep high priced land in asparagus. Our plant breeders were working with the single and definite object of getting a variety that would resist the attacks of the rust disease. They secured three rust resistant varieties, the Washington, the Martha Washington and the Mary Washington, but along with rust resistance, they got exceptional vigor so that one of these, the Mary Washington, has become the standard variety for the Eastern States, regardless of whether the rust is present or not.

Or take the wilt-resistant varieties of tomatoes. The wilt disease first appeared in the South, and has gradually spread over a wide area. Now tomato wilt is a disease that can readily be carried by plants, and when once established in the soil, will remain for years. Mr. Frederick J. Pritchard, whose untimely death was a distinct loss to all of us, set about several years ago making crosses with the idea of getting varieties that would grow and produce good crops on wilt-infested soils. In selecting his parent stock for crossing, he had in mind combining vigor and disease resistance with desirable color and quality of the fruit. In other words, the resulting crosses must be at least as good as the leading commercial varieties, and, in addition, have reasonable disease resistance.

Did Mr. Pritchard succeed? Yes, he did, and as evidence of his success, three varieties that he produced the Marglobe, the Break O'Day and the Pritchard are now accepted as the leading home garden and commercial varieties of tomatoes throughout the greater part of the country. The object sought in these varieties was wilt resistance, and not immunity to leaf-blight, and other diseases, but many growers report that they are to a degree resistant to blight, in addition to being almost immune to the wilt. Blight is a leaf disease that can be controlled by spraying, but the wilt is a bacterial disease that works inside the plant, and so does not respond to spraying.

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The Marglobe variety has heavy, vigorous stems and foliage and a medium size, almost globular, red fruit, very firm, and excellent for canning, in fact, it has been adopted as the leading canning and tomato juice variety by most of the big canners. The Break O'Day is a fine early variety, but its foliage is a little light, and the fruit sometimes sun-scalds. Under favorable conditions, the Break O'Day produces a wonderful crop of fruit that is especially fine for table use.

The Pritchard, named in honor of Mr. Pritchard, was first called Scarlet Topper, although "Pritchard" is the correct name. This is a very early variety, has excellent stem and foliage growth, and splendid globular red fruit that sells well on the market, in fact, it is a very fine tomato for all purposes. Only a few seedsmen have seed of the Pritchard, as it has only recently been released, but most of the seedsmen are offering seed of Marglobe and Break O'Day.

Another good example of the work of the plant breeders is the "Yellows" resistant strains of cabbage. Like the tomato wilt, the yellows is a bacterial disease that gets into the soil and stays there for years, and about the only way to grow cabbage on infested land is to plant one of the resistant strains. If your cabbage, when about half grown, turns a pale yellow, and the lower leaves begin to drop off, you most likely have a well defined case of "yellows." There are several varieties of yellows resistant cabbage, among them Jersey Queen, which is a resistant strain of the well-known Early Jersey Wakefield variety with its pointed heads. Wisconsin All Season, is a medium early variety, and Wisconsin Hollander, is the leading yellows resistant late variety. These resistant varieties will grow and produce a crop on lands that are badly infested with the yellows disease.

If you're having trouble growing the ordinary varieties of tomatoes and cabbage on account of diseases, I'd advise you to try the new sorts, but remember that these resistant strains are not curealls but are mainly resistant to the attacks of the particular diseases that they were created to overcome. I do find the resistant varieties very strong and vigorous. The yellows resistant strains of cabbage for example, appear to stand drought better than the original stock from which they were selected. The creation of disease resistant strains and varieties has opened a new road to the control of many of our most common and troublesome plant diseases.